

ABSTRACT OF THE DISCLOSURE

5 The drilling vehicle comprises a chassis movable over ground, a tool arm, a drilling tool
operatively mounted to the tool arm and defining a drilling extremity and a selectively powered tool arm
actuator assembly attaching the tool arm to the chassis. The tool arm support comprises:

- a first tool arm actuator allowing rotational displacement of the tool arm about a vertical axis;
- a second tool arm actuator allowing linear translation of the tool arm along a first horizontal
axis between two limit positions;
- 10 - a third tool arm actuator allowing linear translation of the tool arm along a second horizontal
axis which is perpendicular to the first horizontal axis, between two limit positions;
- a fourth tool arm actuator allowing rotational displacement of the tool arm about a third
horizontal axis; and
- a fifth tool arm actuator allowing pivotal displacement of the tool arm about a fourth
15 horizontal axis which is perpendicular to the third horizontal axis. The position and orientation of the drilling
tool drilling extremity is controlled with the first, second, third, fourth and fifth tool arm actuators acting on
the tool arm.